

Service Manual

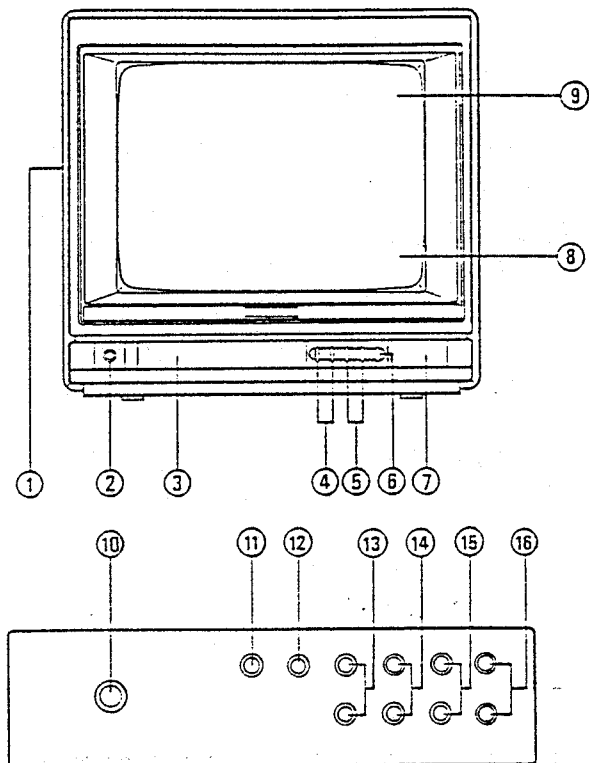


YCT-1467

CONTENTS

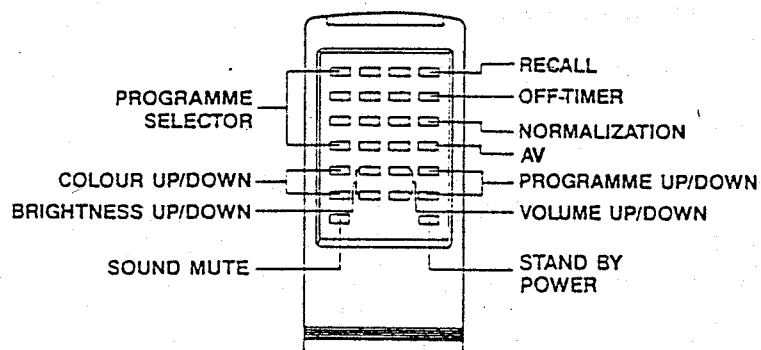
	Page
X-RAY RADIATION PRECAUTION	2
SAFETY PRECAUTION	2
PRODUCT SAFETY NOTICE	2
OPERATION CONTROLS	3
MECHANICAL DISASSEMBLIES	4
GENERAL ADJUSTMENT INSTRUCTION	5-14
EXPLODED VIEW OF REMOTE CONTROL UNIT	15
MECHANICAL PART LIST FOR REMOTE CONTROL UNIT	15
EXPLODED VIEW OF MAIN UNIT	16
MECHANICAL PART LIST FOR MAIN UNIT	17
CIRCUIT DIAGRAM	18-20
BLOCK DIAGRAM	21-22
TUNER CIRCUIT	23
BOTTOM AND COMPONENT VIEW OF P.C. BOARD	24-27
ELECTRICAL PARTS LIST	28

OPERATION CONTROLS



- ① SPEAKER
- ② POWER SWITCH
- ③ PRESET DOOR
- ④ VOLUME CONTROL BUTTONS (UP/DOWN)
- ⑤ PROGRAMME SELECTOR BUTTONS (UP/DOWN)
- ⑥ STAND-BY POWER
- ⑦ INFRA-RED RECEIVING WINDOW
- ⑧ VOLUME LEVEL INDICATOR
- ⑨ PROGRAMME POSITION INDICATOR
- ⑩ CONTRAST CONTROL
- ⑪ AV KEY
- ⑫ AFT ON
- ⑬ AUTO SEARCH BUTTONS (UP/DOWN)
- ⑭ FINE TUNING BUTTONS (UP/DOWN)
- ⑮ COLOUR CONTROL BUTTONS (UP/DOWN)
- ⑯ BRIGHTNESS CONTROL BUTTONS (UP/DOWN)

INSIDE THE PRESET DOOR



CAUTION

Before servicing the chassis, read the "Safety Precaution", "X-Ray Radiation Precaution" and "Product Safety Notice" on Page 2 of this manual."

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-Ray Radiation. To avoid such hazards, the high voltage must not be above the specified limit. The normal value of the high voltage of this receiver is 24KV at zero beam current (minimum brightness) under 220V AC power source. The high voltage must not, under any circumstances, exceed 25KV.
2. Each time a receiver requires servicing, the high voltage should be checked following the High Voltage Check procedure in this manual. It is recommended the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
3. The primary source of X-Ray Radiation in this TV Receiver is the picture tube. For continued X-Ray Radiation protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some parts in this receiver have special safety — related characteristics for X-Ray Radiation protection. For continued safety, parts replacement should be undertaken only after referring to the Product Safety Notice below.

SAFETY PRECAUTION

Warning: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver.

The following are the necessary precautions to be observed before servicing this chassis.

1. Since the power supply circuit of this receiver is directly connected to the AC power line, an isolation transformer should be used during any dynamic service to avoid possible shock hazard.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. When replacing parts or circuit boards, disconnect the power cord.
5. When replacing a high wattage resistor (Metal oxide film resistor) on circuit board, keep the resistor 10mm (1/2 in.) away from circuit board.
6. Connection wires must be kept away from components with high voltage or high temperature.
7. If any fuse in this TV receiver is blown, replace it with the FUSE specified in the chassis parts list.
8. The receiver is designed to operate with 220V (50Hz) AC mains.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the X-Ray Radiation protection afforded by them cannot necessarily be obtained by using replacement components rated for higher wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements, electrical components having such features are marked with "△" on the schematic diagram and the part list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-Ray Radiation or other hazards.

GENERAL ADJUSTMENT INSTRUCTION

This receiver is transistorized and special care should be taken when servicing. Read the following matters that demand special attention before attempting adjustment.

1. Adjustment requires an exact procedure and should be undertaken only when necessary.
2. An isolation transformer should be used during any dynamic service to avoid possible shock hazard.
3. The test equipment specified or its equivalent is required to perform the alignment properly. Use of equipment which does not meet these requirements may result in improper alignment.
4. Correct matching of the equipment is essential. Failure to use proper matching will result in responses which can not represent the true operation of the receiver.
5. The AC power line voltage should be kept 215 to 225 volts (50Hz) during alignment.
6. Do not attempt to connect or disconnect any wire while the receiver is in operation. Make sure the power cord is disconnected before replacing parts in the receiver.
7. Unless otherwise noted, do not perform any adjustment until the receiver has been turned on for at least 10 minutes.

1. Picture And Sound I.F. Adjustment

Test Equipment:

1. AM/FM signal generator (4.5MHz — 6.5MHz).
2. Sweep/Marker signal operator (30 MHz — 60 MHz).
3. Sync. oscilloscope.
4. Oscilloscope (volt sensitivity over 10mV and input impedance over 1 Mohm, below 10PF).
5. Probe (Low capacitance).
6. High impedance electronic voltmeter on VTM (Input impedance having 100K ohm/V at least).
7. DC power supply (Source such as a battery or a well regulated and isolated DC bias supply).

(A) 31.9MHz, 40.4MHz Traps, Picture I.F. And AFC Adjustment

(a) 31.9MHz, 40.4MHz Traps Alignments

1. Connect the signal output of sweep/marker generator to the Tp of Tuner through 1 K ohm resistor and 1000PF capacitor. (See Fig.8.).
2. Connector the external detecting circuit between the syncoscilloscope input and TP 101 (Q101 — Collector). (See Fig.9.).
3. Apply +16.5V DC across C314 on Main Board.
4. Tune T105 for maximum attenuation of 31.9MHz as shown in Fig.10.
5. Tune T106 for maximum attenuation of 40.4MHz as shown in Fig.10.

(b) P.I.F. Alignment:

1. Remove the external detecting circuit from Main Board.
2. Reconnect the sync oscilloscope input with look ohm resistor in series to TP102
3. Apply a +8V DC dummy AGC bias to TP103 (pin 5 of IC101) through 470 ohm resistor.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL

CABINET BACK REMOVAL

1. Disconnect the antenna leads from the antenna terminals.
2. Remove 4 screws (A) securing the Cabinet Back to the Cabinet Front
3. Remove 2 screws (B) securing the Cabinet Back to the Jack Plate and detach the cabinet back.

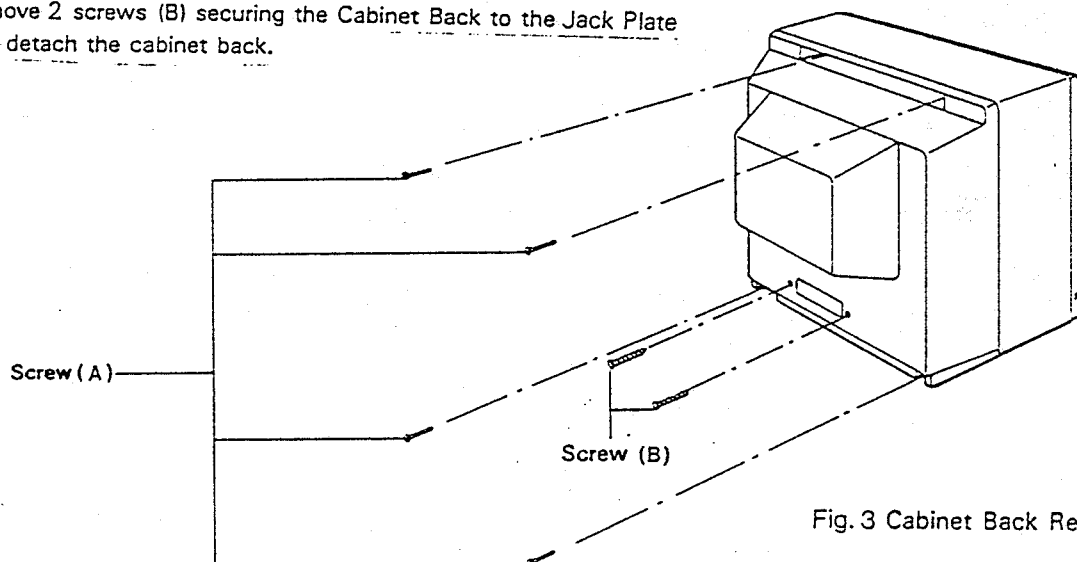


Fig. 3 Cabinet Back Removal

CHASSIS REMOVAL

Following the steps under Cabinet Back Removal, proceed as follows:

1. Unplug the CRT grounding wire socket connected to the CRT Socket Board.
 2. Detach the picture tube anode cap.
- Notice: Certainly discharge the high potential of the picture tube anode to the receiver chassis before removing the anode cap.
3. Detach the CRT Socket (CRT Socket Board).
 4. Take out the chassis for the front cabinet.
 5. Remove 7 screws securing the Control Board to the Cabinet Front.
 6. Take out the control board from the front cabinet.

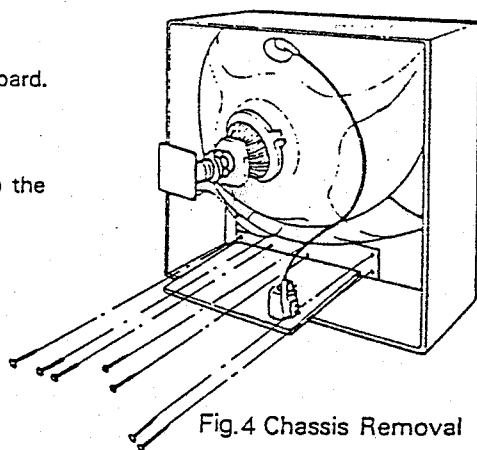


Fig. 4 Chassis Removal

PICTURE TUBE REMOVAL

Following the steps under CHASSIS REMOVAL proceed as follows:

1. Place the cabinet with the front down on a rolled pad or some suitable cushion placed near the top edge of the front panel.
2. Remove 4 screws securing the picture tube to the cabinet, and detach the CRT with the degaussing coil, then grasp the face plate edge of the picture tube with both hands and take out the picture tube.
3. Detach the CRT grounding wire which is attached to the picture tube lugs with spring.

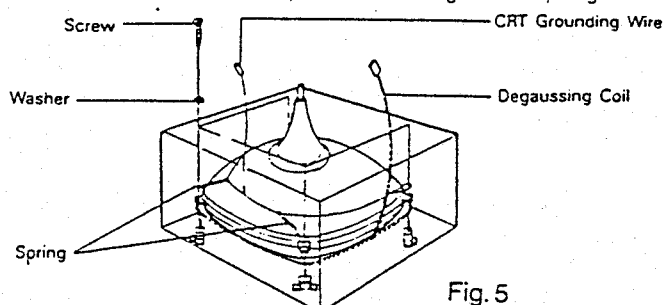


Fig. 5

4. Apply a +3V DC to TP104 (pin 3 of IC405) and TP105 (pin 4 of IC405) through 100 ohm.
5. Tune T102 for maximum gain of 38.9MHz as shown in Fig.11.
6. Tune T101 for maximum gain of 34.47MHz as shown in Fig.11.

(c) AFC Alignment

1. Reconnect the sync oscilloscope input with 1M ohm resistor in series to TP106 (pin 14 of IC101).
2. Adjust T103 for the marker (38.9MHz) of AFC wave form at position. (See Fig.12) the centre.

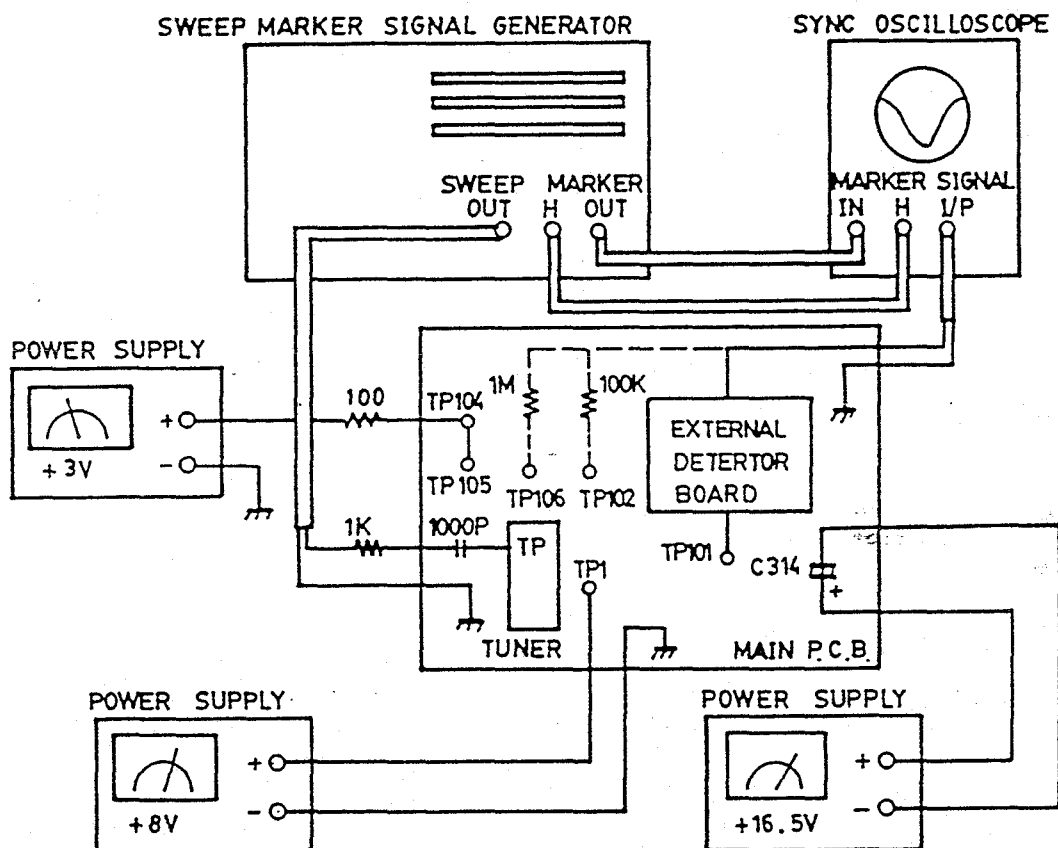


Fig. 8

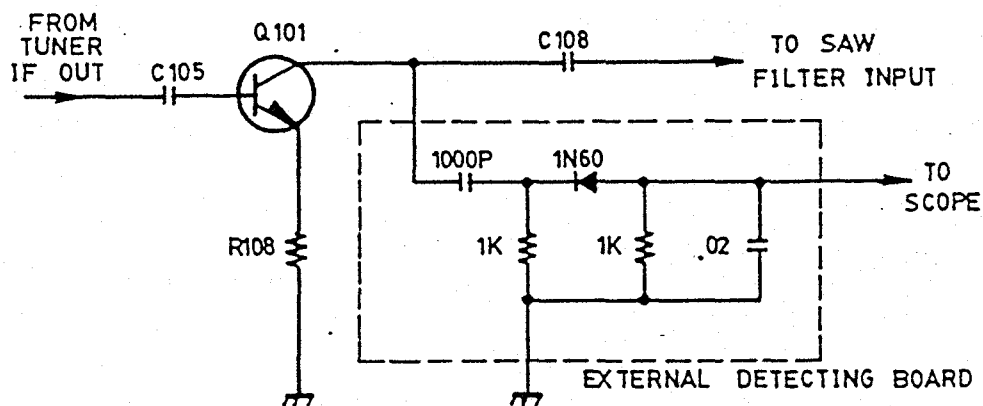


Fig. 9

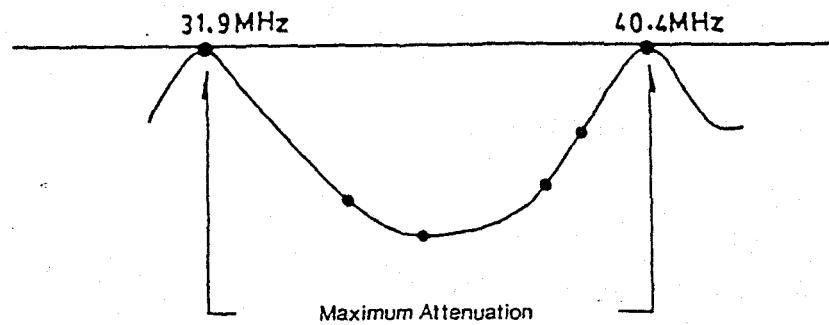
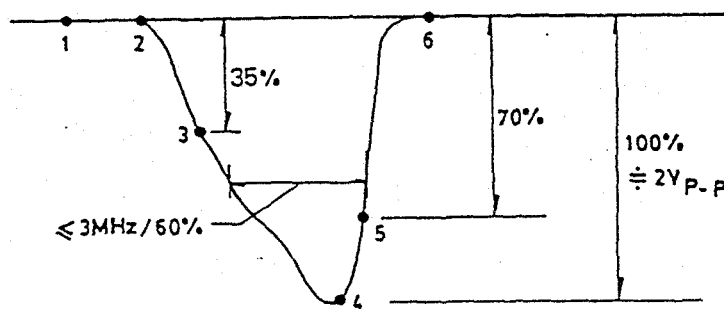


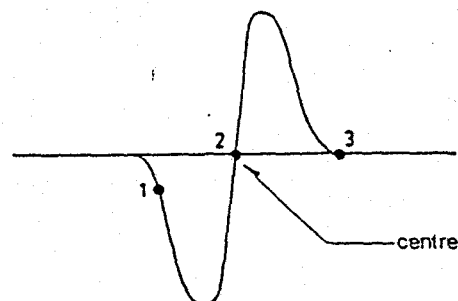
Fig. 10. 31.9, 40.4MHz Traps Resoponse Curve



P.I.F. RESPONSE:

No	Marker of B/G
1	31.9 MHz
2	33.4 MHz
3	34.47 MHz
4	37.9 MHz
5	38.9 MHz
6	40.4 MHz

Fig. 11. P.I.F. Response Curve



AFC Response

No	Marker of B/G
1	37.9 MHz (+)
2	38.9 MHz (0)
3	40.4 MHz (-)

Fig. 12. AFC Response Curve.

(B) S.I.F. Alignment

1. The signal from AM/FM signal generator which is set at 5.5MHz with AF400Hz, 30% FM modulation, is applied to TP107 (between C127 and C128) through a 1K ohm resistor and a 1000pf capacitor as shown in Fig. 13.
2. Short TP103 (pin 5 of IC101) to ground.
3. Connect the oscilloscope input to TP109 (pin 23 of IC101)
4. Apply a +16.5V DC across C314 (TP108).
5. Adjust T104 for the marker (5.5MHz) of SIF waveform at the centre position Fig. 14.

II. General Adjustment

1. Automatic Degaussing

An automatic degaussing coil is attached around the picture tube, degaussing the tube properly in about one second after the set is switched on. If the receiver is moved or faced in a different direction, the power must be switched off at least 15 minutes in order that the automatic degaussing circuit operates properly. External degaussing is necessary if the automatic degaussing proves ineffective after the set is moved. External degaussing is done by moving a degaussing coil circlewise in front of the face plate and then switch off the degaussing coil. If residual colour spots are still found on the screen, adjust the color purity and convergence.

2. B +(110V) Adjustment

CAUTION: To avoid X-Ray hazards, B+ voltage must be set correctly at 110V position.

- (a) Make sure the AC Power supply is 220V, 50Hz.
- (b) Switch on the TV Receiver, tune in an active channel and adjust Brightness/Contrast for maximum.
- (c) Connect TP 601 (Q606 – Emitter) on the Main PCB to a reliable DC voltmeter.
- (d) Adjust VR601 on Main PCB for B +110V voltage reading.

3. High Voltage Check

CAUTION: There is no high voltage adjustment in this chassis, B+ 110V voltage directly relates to the high voltage, it must be properly adjusted to insure the correct high voltage. The high voltage must not exceed 25KV under any conditions.

- (a) Connect an accurate high voltage meter to the second anode cap of the picture tube.
- (b) Turn on the receiver, set Brightness the Contrast controls to minimum. (Zero beam current)
- (c) Make sure the high voltage does not exceed 24KV.
- (d) No matter whether the luminance, contrast and chrominance controls are set to maximum or minimum, the high voltage must be kept under 25KV.

4. Focusing Adjustment

- (a) Receive the philips pattern signal
- (b) Set the contrast control to the maximum position.
- (c) Adjust focus control of flyback transformer for a well-defined, sharpest display in the centre of the screen.

5. Height Adjustment

- (a) Receive the philips pattern signal.
- (b) Adjust the height control (VR205) to slightly overscan the screen.

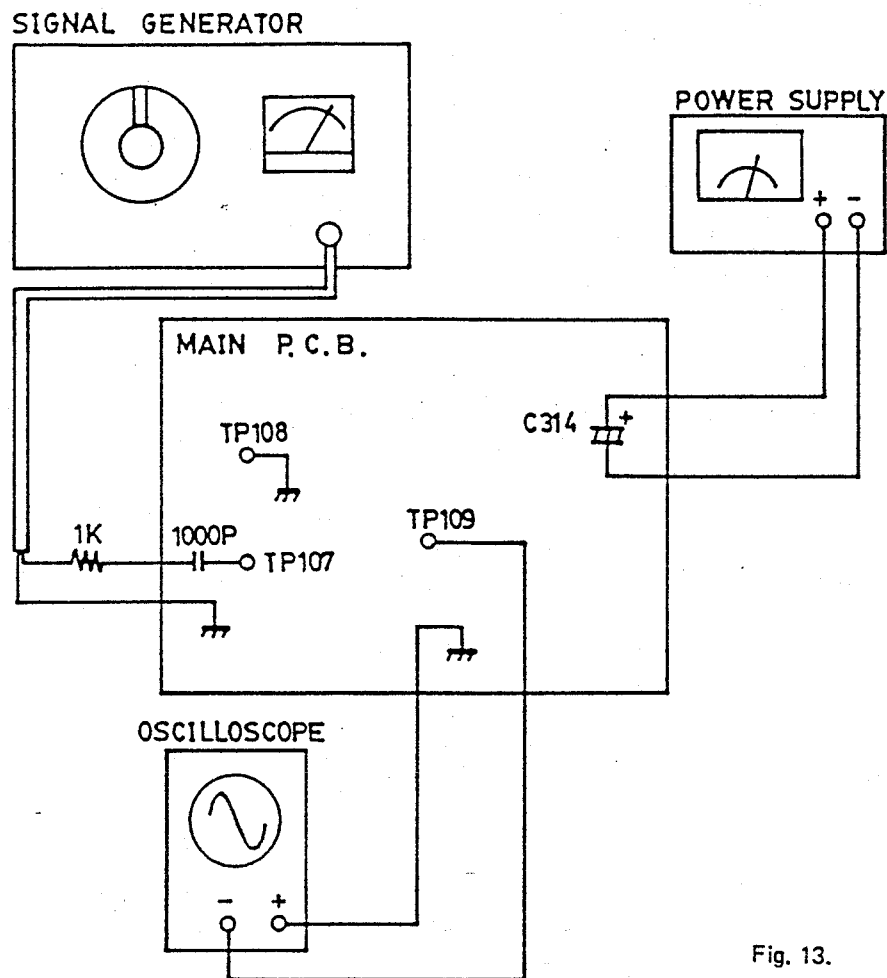


Fig. 13.

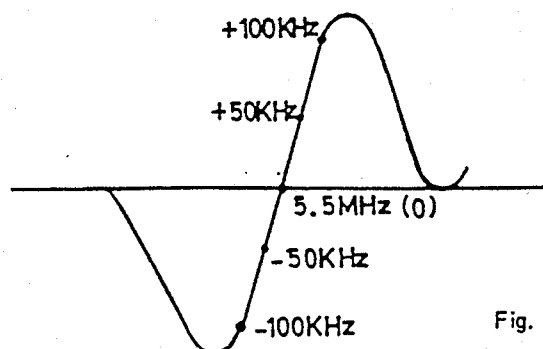


Fig. 14. SIF Response Curve

10. Delay AGC Adjustment

- (a) Tune in the colour bar pattern signal
- (b) Set input signal level at 60 dB
- (c) Connect a high impedance DC Voltmeter to tuner AGC terminal.
- (d) Adjust RF AGC control (VR101) for 6.5V $\pm$ 0.2V reading.
- (e) Increase input signal level to 100 dB.
- (f) Check for normal picture, sound and sync.

11. White Balance Adjustment

- (a) Receive a monochrome signal and warm up the set for 15 minutes.
- (b) Set the R.G.B. cut-off (VR501, VR503, VR505) at the centre position.
- (c) Rotate the G.B. drive controls (VR502, VR504) fully counter-clockwise first, then clockwise rotate back to 1/3 position.
- (d) Turn the screen control to minimum position.
- (e) Disconnect the Y signal output terminal connector.
- (f) Short TP202 (between C306 and C307) to GND by jumper wire.
- (g) Rotate the screen control gradually clockwise until the first horizontal line appears on the screen.
- (h) If the first horizontal line is in red, adjust VR503, VR504 to increase the green and blue component level to get a white horizontal line.
- (i) Remove the Jumper wire, connect back the Y signal output terminal and switch back to TV.
- (j) Receive the philips pattern signal and set the contrast colour control to minimum and brightness control to maximum
- (k) Adjust VR502, VR504 to maintain a good white balance at the brightest part of screen.

12. On-Screen Position Adjustment

- (a) Select the position "29" by the programme button (+ or -).
- (b) Tune in the philips pattern signal.
- (c) Press the "Recall" button once, the large character size of programme No. will be changed to small size for approx. 3 seconds.
- (d) Adjust C413 for the programme No "29" (small size) position as shown in Fig.16.

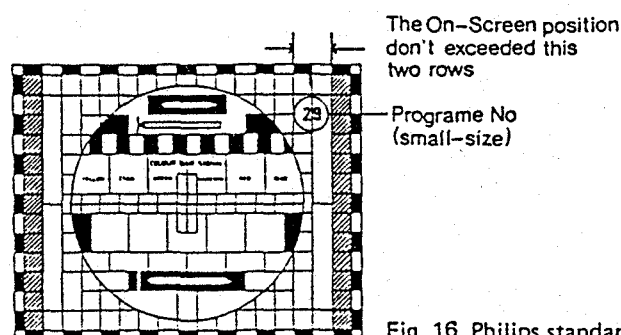


Fig. 16. Philips standard colour pattern

6. Horizontal Position

- (a) Receive the philips pattern.
- (b) Adjust horizontal hold control (VR203) to the centre

7. Vertical Hold Adjustment

- (a) Receive the philips pattern.
- (b) Short TP201 (pin 37 of IC202) to GND by jumper wire.
- (c) Connect a frequency counter to TP202 (between C306 and C307).
- (d) Adjust Vertical Hold control (VR204) for 45 – 46Hz reading.

8. Colour Syne Adjustment

- (a) Tune in a colour bar signal.
- (b) Set the colour control to maximum.
- (c) Cut off the colour killer by connection the TP203 (pin 2 of IC202) and TP204 (pin 12 of IC202) with 10K ohm resistor.
- (d) Short TP205 (L206) to GND by jumper wire.
- (e) Adjust the colour sync variable capacitor (C242) for the colour bar pattern stand still or drifts slowly across the picture screen.

9. PAL Matrix Adjustment

- (a) Tune in a colour bar signal
- (b) Use oscilloscope with 2 channels input and set to "X – Y" mode.
- (c) Channel 1 (X) is connected to TP206 (pin 21 of IC202) (R – Y)
- (d) Channel 2 (Y) is connected to TP207 (pin 22 of IC202) (B – Y)
- (e) Adjust amplitude balance VR202 until the centre points of the two wave forms bring together (Fig.15.)
- (f) Adjust T205 until all other points of two waveforms bring together (Fig.15.)
- (g) Adjust T206 to obtain the maximum hexagon.

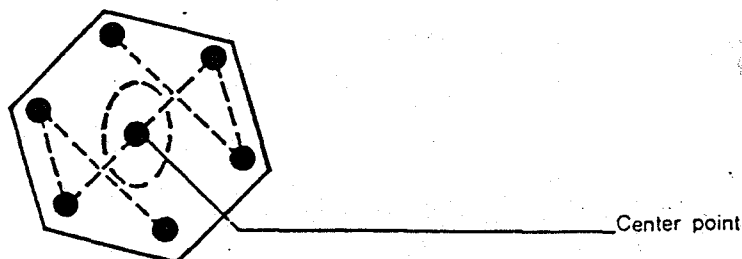


Fig. 15 Matrix Vector Diagram.

- (c) Adjust two tabs of the 4 Pole Magnets to change the angle between them (see Fig. 21.) and superimpose red and blue vertical lines in the centre area of the picture screen. (See Fig. 22.)
- (d) Turn both tabs of the 4 Pole Magnets to change the angle to superimpose red and blue horizontal lines at the centre of screen (See Fig. 21.)
- (f) Repeat adjustments 3, 4, 5, keeping in mind red, green and blue movement, because 4 Pole Magnets and 6 Pole Magnets interact and make dot movement complex.

4. Circumference Convergence Adjustment

NOTE: This adjustment requires Rubber Wedges and Glass Cloth Tapes.

- (a) Loosen the clamping screws of deflection yoke to allow the yoke to tilt.
- (b) Place a wedge as shown in Figure 6 temporarily. (Do not remove cover paper on adhesive part of the wedge).
- (c) Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See Fig. 23.) Push the mounted wedge into the space between picture tube and the yoke to hold the yoke temporarily.
- (d) Place other wedge into bottom space and remove the cover paper to stick.
- (e) Tilt front of the yoke right or left obtain better convergence in circumference. (See Fig. 22.)
- (f) Hold the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to hold the yoke.
- (g) Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
- (h) After placing three wedges, recheck over all convergence. Tighten the screw firmly to hold the yoke tightly in place.
- (i) Stick 3 glass cloth tapes on wedges as shown in Figure 20.

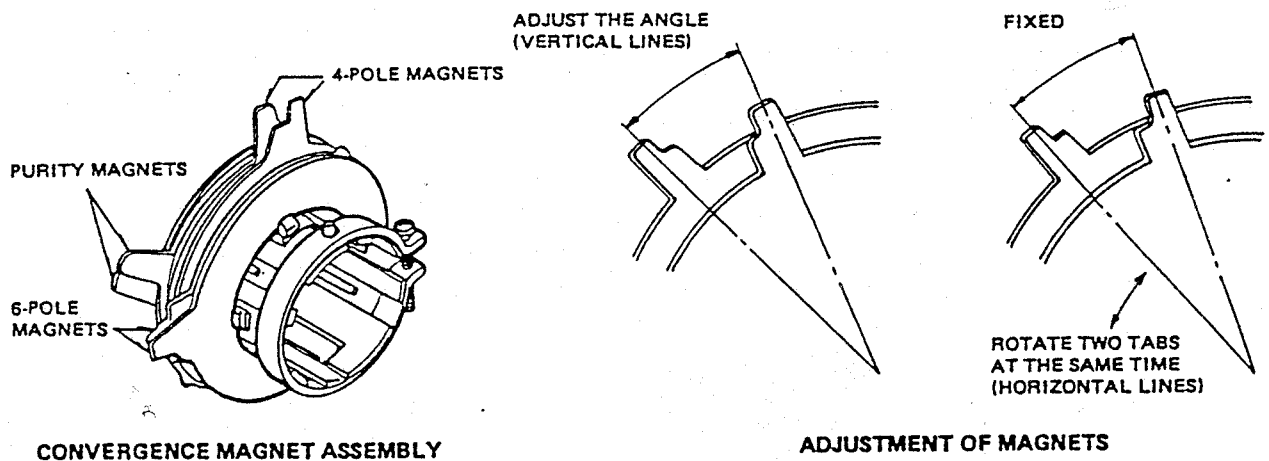


Fig. 21.

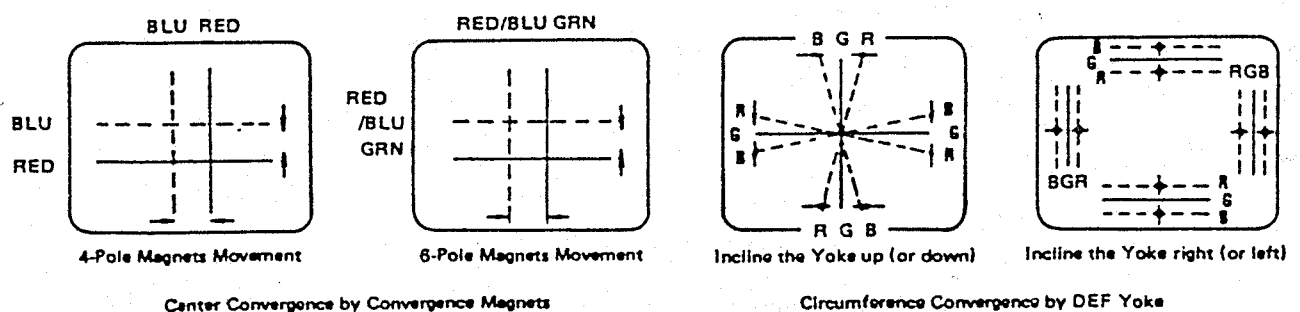


Fig. 22. Dot Movement Pattern

13. Sub-Brightness Adjustment

- (a) Receive the philips pattern signal.
- (b) Set the contrast, Brightness and colour controls to minimum position.
- (c) Adjust sub-brightness (VR404) until light just appears on the screen.

14. Sub-Colour Adjustment:

- (a) Receive the philips pattern signal.
- (b) Set the contrast to maximum. Press the normalization button on Remote Control Unit.
- (c) Adjust Sub-Colour Control (VR405) to optimize the natural colour intensity.

III. Color Purity And Convergence Adjustment

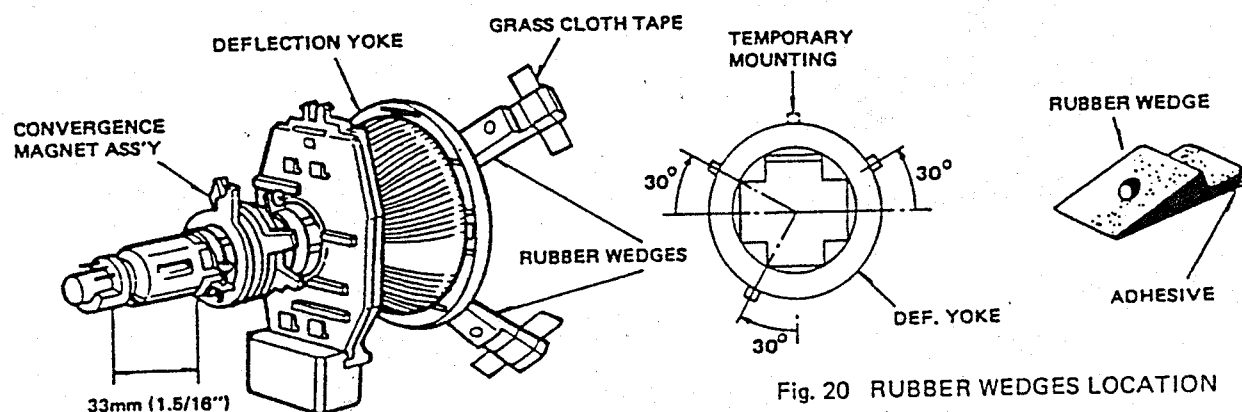
1. Color Purity Adjustment

NOTE: Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

- (a) Demagnetize the picture tube and cabinet using a degaussing coil.
- (b) Turn the Contrast and Brightness controls to maximum.
- (c) Adjust Red and Blue controls (VR501) and (VR505); to provide only a green raster. Advance the Green Bias control (VR502) if necessary.
- (d) Loosen the clamp screw holding the yoke backward to provide vertical green belt (Zone) in the picture screen.
- (e) Remove the Rubber Wedges.
- (f) Rotate and spread the tabs of the purity magnet (see Fig.21.) around the neck of the picture tube until the green belt is in centre of the screen. At the same time, centre the raster vertically.
- (g) Move the yoke slowly forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
- (h) Check the purity of the red and blue raster by adjusting the Bias controls.
- (i) Obtain a white raster, referring to white balance adjustment.
- (j) Proceed with convergence adjustment.

2. Convergence Magnet Assembly Positioning

Convergence Magnet Assembly and Rubber Wedges need mechanical positioning following Fig. 20.

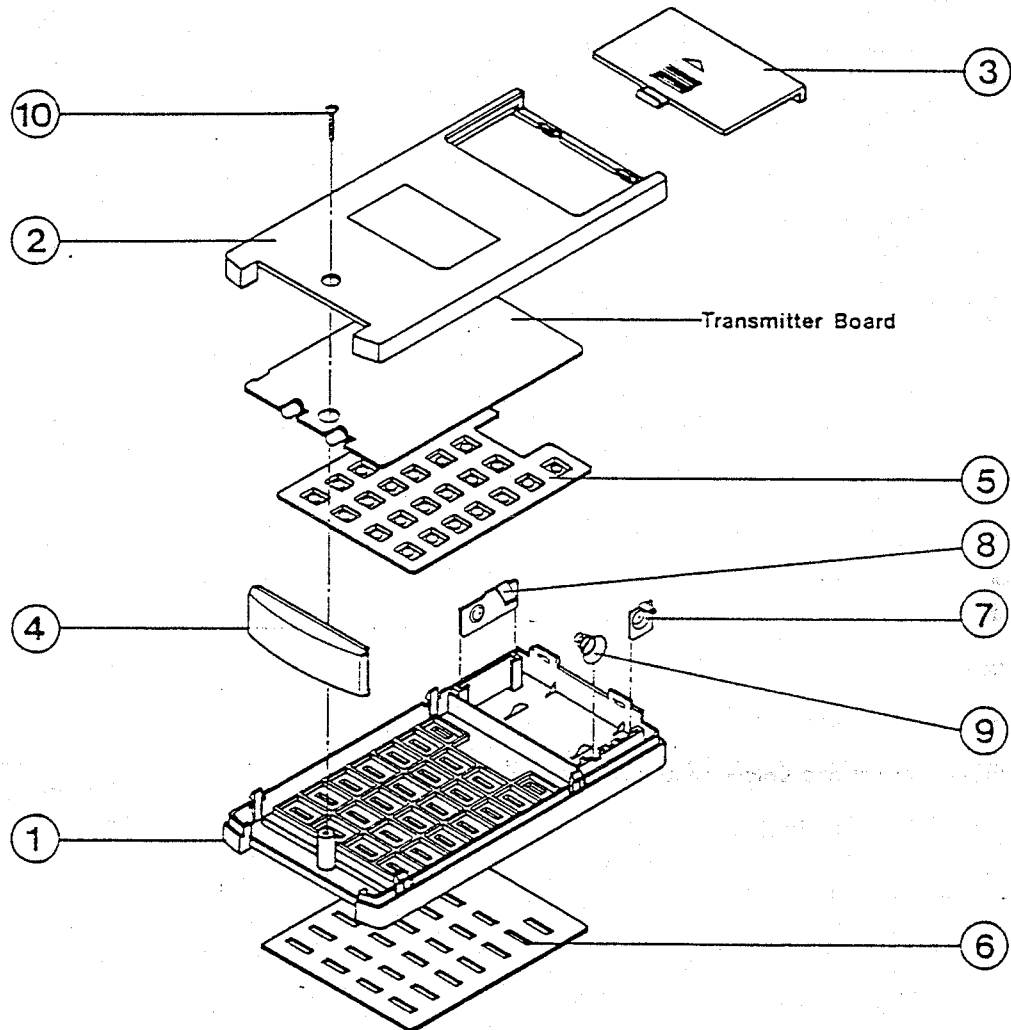


3. Centre Convergence Adjustment

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

- (a) Receive crosshatch pattern with a color bar signal generator.
- (b) Adjust the Brightness and Contrast controls for well defined pattern.

REMOTE CONTROL UNIT



MECHANICAL PART LIST

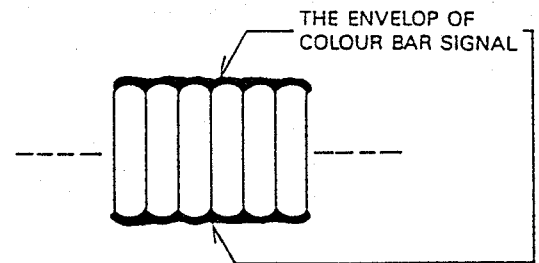
ITEM	PART NO.	DESCRIPTION
1.	A01-A0078-01	Top Cabinet
2.	A01-A0079-01	Bottom Cabinet
3.	A01-A0080-00	Battery Door
4.	A01-A0081-00	Infrared Lens
5.	D01-A0020-00	Rubber Contact Plate

ITEM	PART NO.	DESCRIPTION
6.	D00-A0049-00	Handset Inlay
7.	B00-A0025-00	Battery Contact Plate (+)
8.	B00-A0024-00	Battery Contact Plate (+/-)
9.	E00-A0009-00	Battery Contact Spring (-)
10.	M3P-T2601-08	Screw T2.5x8 P/H (+)

IV. Colour Decoder Adjustment For SECAM System

1. Bell Filter Adjustment

- Apply a SECAM colour bar signal (60dB level) to the input.
- Connect an oscilloscope to Pin 27 of IC201.
- Adjust T203 to make the envelop of colour bar signal into flat. (Fig. 23)



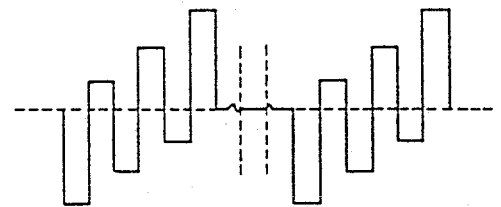
SECAM COLOUR BAR SIGNAL Fig. 23.

2. Identifier Adjustment

- Apply a SECAM colour bar signal (60dB level) to the input.
- Connect a high impedance DC Voltmeter to Pin 26 of IC201.
- Adjust T204 to the indent filter voltage into maximum value ($\sim 10V$).

3. B-Y Demodulation

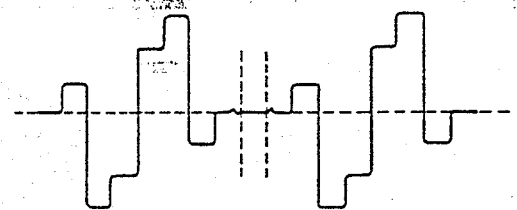
- Apply a SECAM colour bar signal to the input.
- Set Brightness, Contrast and Colour controls to the maximum.
- Connect an oscilloscope to Pin 2 of socket H.
- Adjust T201 to obtain a B-Y signal with correct chrominance output, as shown in Fig. 24.



B-Y SIGNAL Fig. 24.

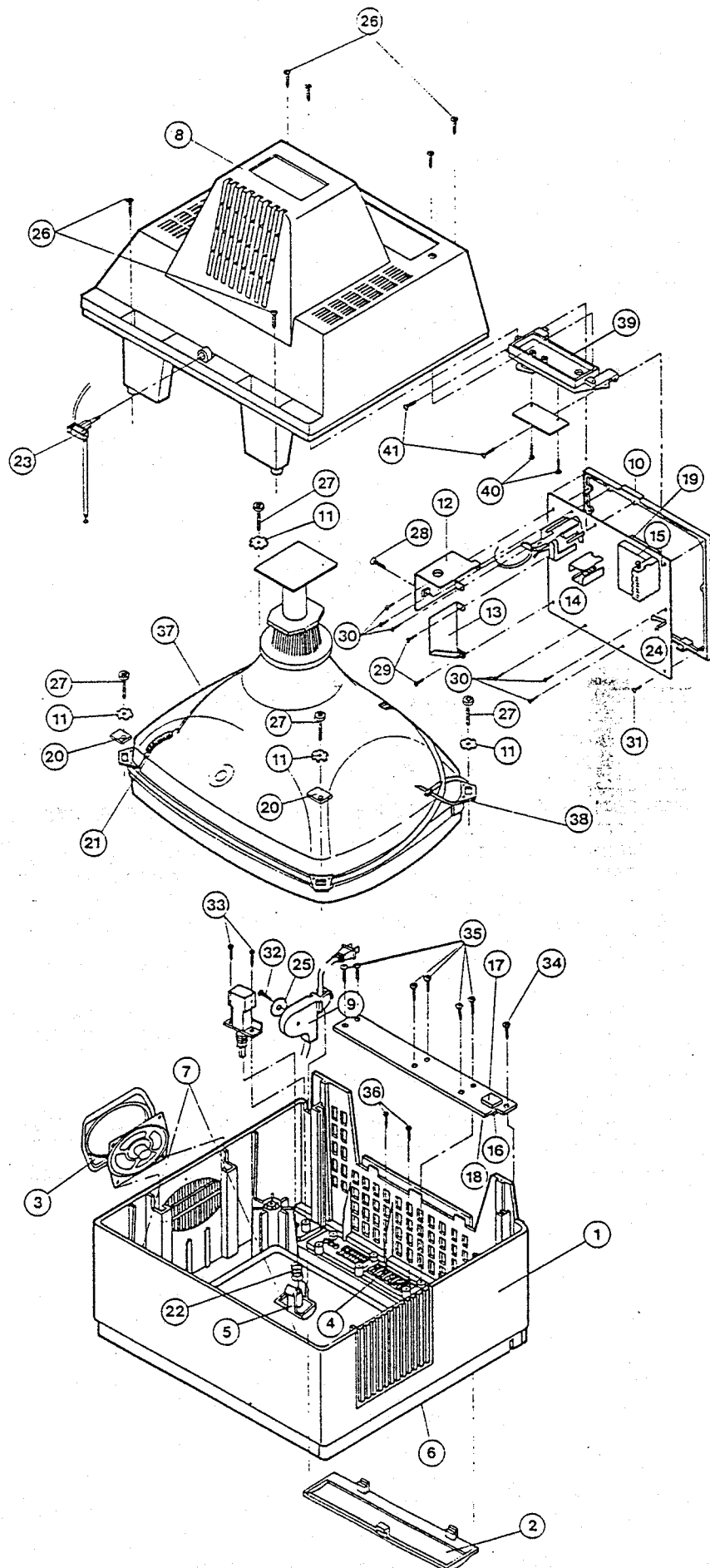
4. R-Y Demodulation

- Apply a SECAM colour bar signal.
- Set Brightness, Contrast and Colour controls to maximum.
- Connect an oscilloscope to Pin 3 of socket H.
- Adjust T202 to obtain an R-Y signal with correct chrominance output, as shown in Fig. 25.



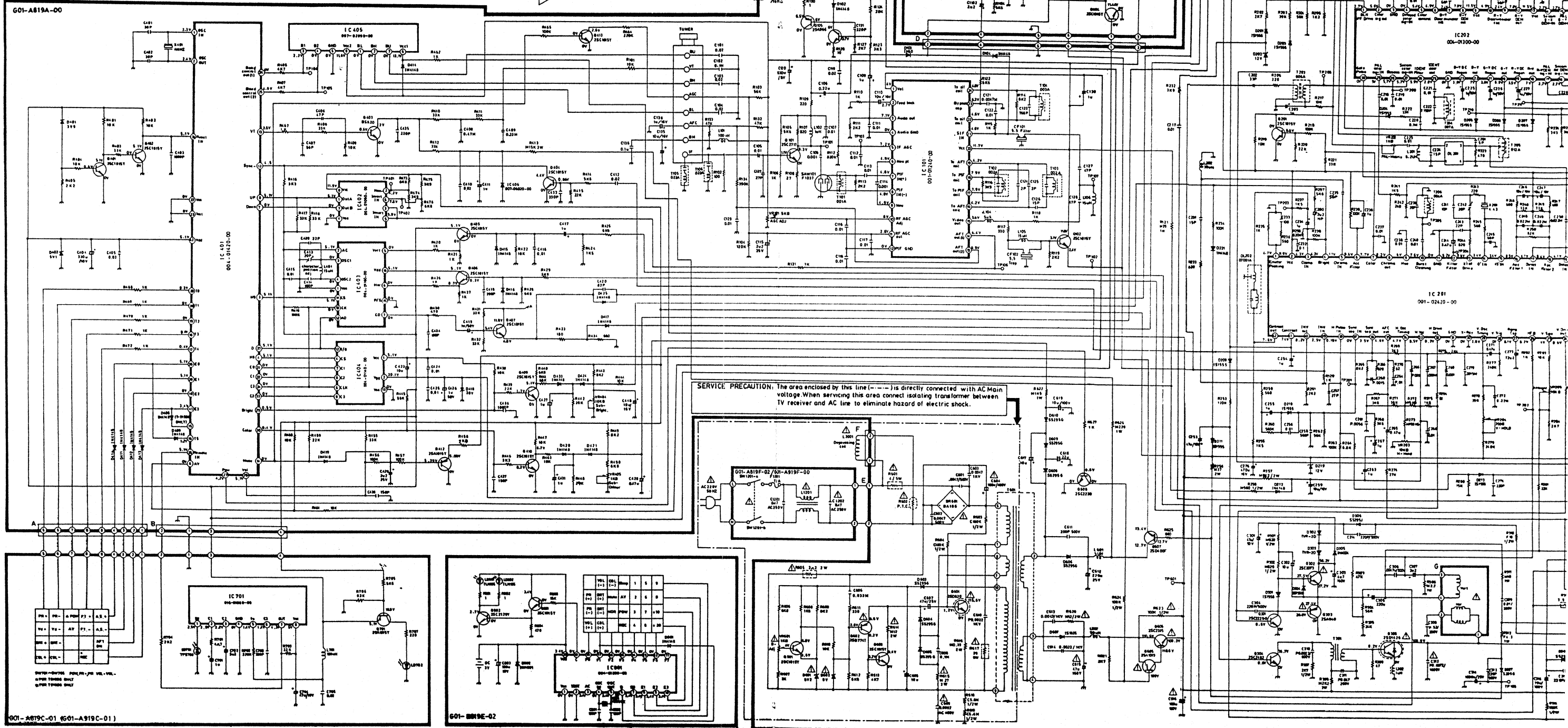
R-Y SIGNAL Fig. 25.

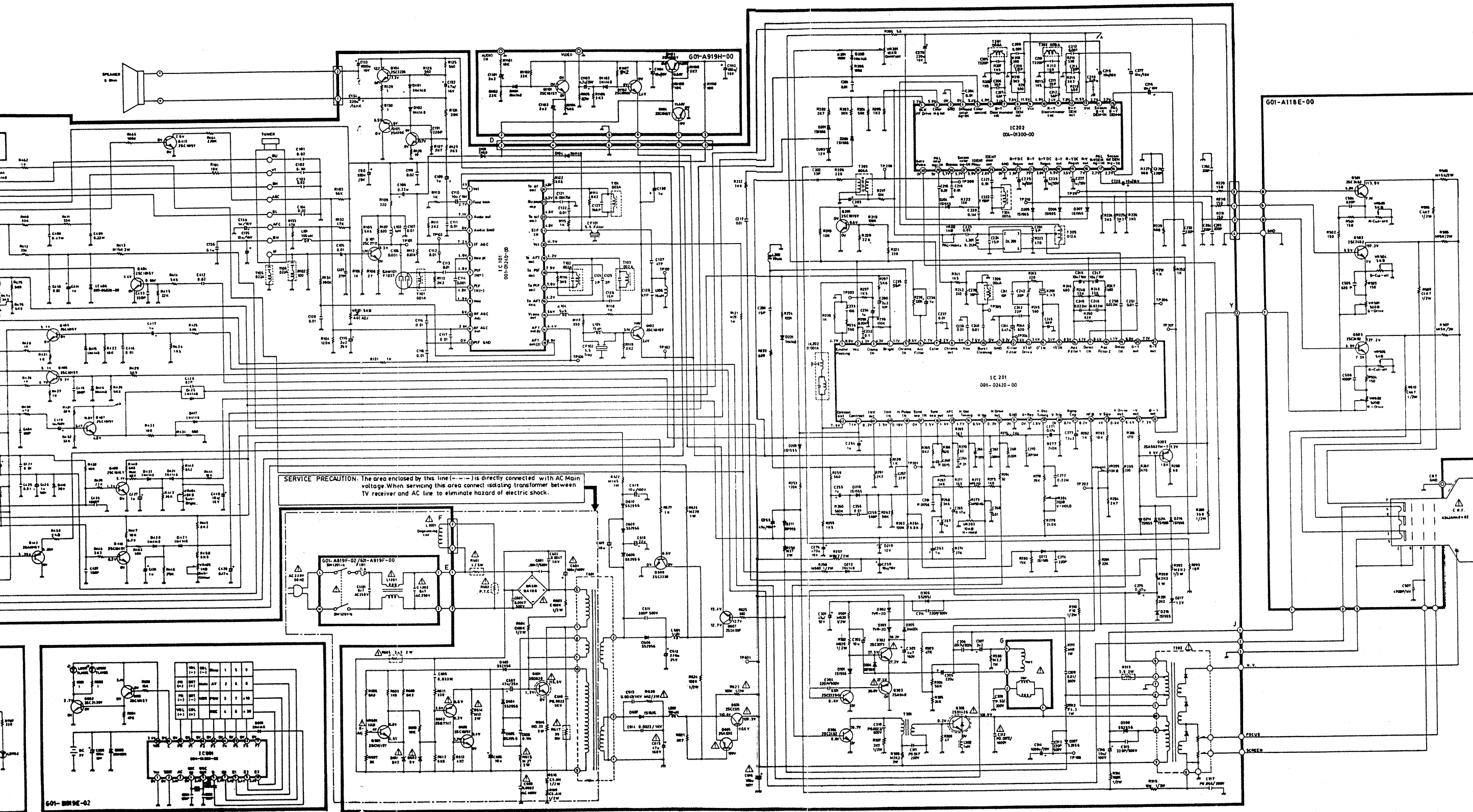
EXPLODED VIEW OF MAIN UNIT



MECHANICAL PARTS LIST FOR MAIN UNIT

ITEM	PART NO.	DESCRIPTION
1	A01-A0088-01	FRONT CABINET-METALLIC DARK GRAY SPRAY W/SILK SCREEN
2	A01-A0089-01	PRESET DOOR-METALLIC DARK GRAY SPRAY W/SILK SCREEN
3	A01-A0090-00	SPEAKER HOLDER-BLACK MOULDED
4	A01-A0091-00	PUSH BUTTON-BLACK MOULDED
5	A01-A0092-00	POWER SW. KNOB-BLACK MOULDED
6	A01-A0093-00	INFRARED LENS
7	A01-A0094-00	CABINET MTG. HOLDER-BLACK MOULDED
8	A01-A0134-00	BACK CABINET-BLACK MOULDED
9	A01-A0009-00	AC CORD HOLDER-BLACK MOULDED
10	A03-B0111-00	CHASSIS BRACKET-BLACK MOULDED
11	B01-A0001-01	METAL WASHER
12	B01-A0005-00	HEAT SINK BRACKET FOR POWER
13	B01-A0006-00	HEAT SINK FOR HORIZONTAL AMP.
14	B01-A0007-00	HEAT SINK TRANSISTOR
15	B01-A0008-00	PIF SHIELDING COVER
16	B00-A0027-00	SHIELD CAN 'A'
17	B00-A0028-00	SHIELD CAN 'B'
18	B00-A0029-00	SHIELD CAN 'C'
19	B00-A0041-00	SHIELD CAN
20	B00-A0052-00	METAL FIXER (FOR CRT FIXING)
21	E00-A0001-00	GROUNDING WIRE SPRING DIA. 7 X 14 FOR TWISTED WIRE
22	E00-A0011-00	POWER KNOB SPRING
23	F00-A0004-00	INDOOR ANTENNA-SINGLE TYPE (VHF) DIA. 8 X 200
24	J00-W0002-00	WIRE LUG
25	L00-P3514-F0	FIBRE WASHER
26	M1P-T3501-25	T3.5 X 25 P/H (+) FOR BACK/FRONT CAB. MTG.
27	M1B-T4001-25	T4 X 25 B/H (+) FOR CRT/FRONT CAB. MTG.
28	M1B-T4001-10	T4 X 10 B/H (+) FOR HEAT SINK/FLY BACK TRANS MTG.
29	M1P-T3001-12	T3 X 12 P/H (+) FOR HEAT SINK/CHASSIS BKT. MTG.
30	M1P-T3001-12	T3 X 12 P/H (+) FOR HEAT SINK/CHASSIS BKT. MTG.
31	M1P-T3001-08	T3 X 8 P/H (+) FOR MAIN P.C.B./CHASSIS BKT. MTG.
32	M1P-T3001-08	T3 X 8 P/H (+) FOR AC CORD/AC CORD HOLDER MTG.
33	M1P-T3001-10	T3 X 10 P/H (+) FOR POWER SW./FRONT CAB. MTG.
34	M1B-T2600-10	T2.6 X 10 B/H (+) FOR CONTROL P.C.B./FRONT CAB. MTG.
35	M1B-T2600-06	T2.6 X 8 B/H (+) FOR CONTROL P.C.B./FRONT CAB. MTG.
36	M1B-T2600-06	T2.6 X 6 B/H (+) FOR PUSH BUTTON/FRONT CAB. MTG.
37	P01-01086-01	TWISTED WIRE L = 860 MM
38	A04-A0114-00	CABLE TIE L = 8"
39	A03-B0135-00	JACK PLATE-BLACK MOULDED
40	M1P-T3001-08	T3 X 8 P/H (+) FOR AV BOARD/JACK PLATE MTG
41	M1B-T3001-12	T3 X 12 B/H (+) FOR JACK PLATE/P.C.B./CHASSIS BKT. MTG.





ELECTRICAL PARTS LIST

SCHEMATIC NO.	PART NO.	DESCRIPTION
SOCKET D	**J05-0206A-01	TAIKO TL-25 V-TYPE CONNECTOR 6 PINS WIRE TYPE: AWG26 STRAND UL1007 PIN 1 L1=110MM BROWN L2=3.5MM TINNED PIN 2 L1=120MM RED L2=3.5MM TINNED PIN 3 L1=120MM ORANGE L2=3.5MM TINNED PIN 4 L1=150MM YELLOW L2=3.5MM TINNED PIN 5 L1=140MM GREEN L2=3.5MM TINNED PIN 6 L1=110MM BLUE L2=3.5MM TINNED
PIN JACK ASSEMBLY	**V01-03000-00	PIN JACK V-TYPE BLACK
	**V01-03000-04	PIN JACK V-TYPE YELLOW
	**V01-13000-00	EARTH TERMINAL
COMPONENT NOT MOUNTED ON PCB		
L2001	H07-0801A-00	DEGAUSSING COIL
	L05-01002-00	3"x 5" LOUD SPEAKER 8 OHM
	T01-01340-00	COLOR PICTURE TUBE A34JAN40X02(W)
	J05-0202A-01	TAIKO TL-25 V-TYPE CONNECTOR 2 PIN WIRE TYPE: AWG24, STRAND, 1007 UL/CSA APPROVED PIN 1 L1=380MM BLACK L2=3.5MM TINNED PIN 2 L1=380MM WHITE L2=3.5MM TINNED
FOR CRT GROUNDING	J05-0101A-10	TAIKO TS-80 CONNECTOR 1 PIN WIRE TYPE: AW24, STRAND 1015 UL/CSA APPROVED L1=280MM BLACK L2=10MM NON-TINNED

SCHEMATIC NO.	PART NO.	DESCRIPTION
***** AC LINE FILTER PCB ASSEMBLY *****		
C1201, 1202	F05-P474V-E0	FILM CAPACITOR 0.47UF AC 250V
	**G01-A819F-02	AC LINE FILTER P.C. BOARD
L1201	H16-0601C-00	AC LINE FILTER
	S05-A2620-0D	AC LINE CORD VDE L=2.6M W/FILTER
SW1201	**K14-0201E-00	POWER SWITCH "ITT" 2P1T
F1201	U01-02010-00	FUSE T2A AC 250V
	V04-06001-00	FUSE HOLDER
FOR D2 (NEUTRAL LINE)	J05-0101A-02	TAIKO TS-80 CONNECTOR 1 PIN WIRE TYPE: AWG22, STRAND DOUBLE INSULATION, 1617 UL/CAS APPROVED L1=360MM BLUE L2=10MM NON-TINNED
FOR D1 (LIVE LINE)	J05-0101A-04	TAIKO TS-80 CONNECTOR 1 PIN WIRE TYPE: AGW22, STRAND DOUBLE INSULATION, 1617 UL/CSA APPROVED L1=360MM BROWN L2=10MM NON-TINNED
REMARK: **NEW PARTS		

ELECTRICAL PARTS LIST

SCHEMATIC NO.	PART NO.	DESCRIPTION
CONTROL P.C.B. ASSEMBLY		
Q701	A01-A105E-00	2SA1015Y
CARBON FILM RESISTOR 1/4W +/-5%		
R707	D01-A221C-D0	220 OHM
R704	D01-A222C-D0	2.2 KOHM
R701	D01-A047C-D0	4.7 OHM
R705	D01-A562C-D0	5.6 KOHM
R703	D01-A223C-D0	22 KOHM
R706	D01-A823C-D0	82 KOHM
R702	D01-A224C-D0	220 KOHM
CERAMIC CAPACITOR		
C705	F01-C203F-G0	0.02UF 50V +80-20%
C703	F01-C331F-C0	330PF 50V +/-5%
ELECTROLYTIC CAPACITOR		
C702	F01-E335F-E0	3.3UF 50V +/-20%
C701	F01-E105F-E0	1UF 50V +/-20%
C704	F01-E476B-E0	47UF 10V +/-20%
PC8003	**G01-A819C-01	CONTROL P.C. BOARD
L701	H05-0111A-00	CHOKE COIL 100UH
SW701, 702, 703, 704, 705	K13-0101A-01	TACT SWITCH (SHAFT LENGTH 1.5MM) ALTERNATE (K07-0101A-01)
	K13-0101A-02	TACT SWITCH (SHAFT LENGTH 6MM) ALTERNATE (K07-0101A-02)
IC701	016-01080-00	IC CX20106A
LD701	P01-06010-00	PHOTO DIODE TPS703 ALTERNATE PH302 (P04-06010-00)
LD702	P01-01010-00	LED RED TLR124
SOCKET B	J05-0204A-01	TAIKO CONNECTOR 4 PINS HTL25H04 B1-T 001T-5100 WIRE TYPE: AWG26 STRAND, 1007 PIN 1 L1=260MM BLACK L2=3.5MM TINNED PIN 2 L1=320MM RED L2=3.5MM TINNED PIN 3 L1=260MM WHITE L2=3.5MM TINNED PIN 4 L1=260MM YELLOW L2=3.5MM TINNED

SCHEMATIC NO.	PART NO.	DESCRIPTION
SOCKET A	**J05-0209A-00	TAIKO CONNECTOR 9 PINS WIRE TYPE: AWG24, STRAND, 1007 UL/CSA APPROVED PIN 1 L1=230MM BROWN L2=3.5MM TINNED PIN 2 L1=230MM RED L2=3.5MM TINNED PIN 3 L1=230MM ORANGE L2=3.5MM TINNED PIN 4 L1=230MM YELLOW L2=3.5MM TINNED PIN 5 L1=230MM GREEN L2=3.5MM TINNED PIN 6 L1=230MM BLUE L2=3.5MM TINNED PIN 7 L1=230MM VIOLET L2=3.5MM TINNED PIN 8 L1=230MM WHITE L2=3.5MM TINNED PIN 9 L1=230MM BLACK L2=3.5MM TINNED
A.V. INPUT P.C.B. ASSEMBLY		
TRANSISTOR		
Q1101, 1102, 1104	A01-C815E-00	2SC1815Y
Q1103	A01-A015E-00	2SA1015Y
DIODE		
D1101, 1102	B01-01148-00	1N4148
CARBON FILM RESISTOR +/-5% 1/4W		
R1110	D01-A101C-D0	100 OHM
R1105	D01-A471C-D0	470 OHM
R1108	D01-A272C-D0	2.7 KOHM
R1106	D01-A332C-D0	3.3 KOHM
R1104	D01-A562C-D0	5.6 KOHM
R1107, 1109, 1101	D01-A103C-D0	10 KOHM
R1102, 1103	D01-A223C-D0	22 KOHM
R1107	D01-A822C-D0	82 KOHM
ELECTROLYTIC CAPACITOR (SINGLE END TYPE)		
C1101, 1102	F01-E225F-E0	2.2UF 50V +/-20%
C1104	F01-E106C-E0	10UF 16V +/-20%
C1103	F01-E475D-E0	4.7UF 25V +/-20%
C1112	F01-E107C-E0	100UF 16V +/-20%
	**G01-A919H-00	AV INPUT P.C. BOARD (40MM X 83MM X 1.6MM)

ELECTRICAL PARTS LIST

SCHEMATIC NO.	PART NO.	DESCRIPTION
R406, 407, 613	D01-A472C-D0	4.7 KOHM
R105, 122, 297, 414	D01-A562C-D0	5.6 KOHM
R264, 425, 428, 440, 450, 473, 476, 606, 612	D01-A682C-D0	6.8 KOHM
R114, 265, 449, 609	D01-A822C-D0	8.2 KOHM
R101, 217, 219, 293, 401, 402, 404, 409, 422, 463, 438, 460, 461	D01-A103C-D0	10 KOHM
R443, 444, 447, 610		
R280	D01-A153C-D0	15 KOHM
R283	D01-A183C-D0	18 KOHM
R124	D01-A203C-D0	20 KOHM
R220, 281, 415, 439, 459	D01-A223C-D0	22 KOHM
R305, 448	D01-A243C-D0	24 KOHM
R274,	D01-A273C-D0	27 KOHM
R221, 222, 248, 249, 403, 408, 410, 411, 412, 417, 418	D01-A333C-D0	33 KOHM
R431, 432, 455		
R271, 442	D01-A363C-D0	36 KOHM
R203, 278	D01-A393C-D0	39 KOHM
R132, 133, 303	D01-A473C-D0	47 KOHM
R103, 204, 262, 304, 445	D01-A563C-D0	56 KOHM
R441	D01-A683C-D0	68 KOHM
R250	D01-A823C-D0	82 KOHM
R201, 218, 238, 263, 296, 419, 234	D01-A104C-D0	100 KOHM
456, 457, 465		
R104, 253	D01-A124C-D0	120 KOHM
R464	D01-A224C-D0	220 KOHM
R277, 279	D01-A244C-D0	240 KOHM
R239	D01-A334C-D0	330 KOHM
R134	D01-A394C-D0	390 KOHM
R260	D01-A564C-D0	560 KOHM
R112, 298	D01-A824C-D0	820 KOHM
CARBON FILM RESISTOR +/-5% 1/2W		
R289	D01-A361C-F0	360 OHM
R307	D01-A272C-F0	2.7 KOHM
R315	D01-A103C-F0	10 KOHM
R623, 624	D01-A104C-F0	100 KOHM
R314	D01-A154C-F0	150 KOHM
R622	D01-A153C-F0	1.5 KOHM
METAL FILM RESISTOR		
R272	D00-C153B-D0	15 KOHM +/-2% 1/4W
R273	D00-C154B-D0	150 KOHM +/-2% 1/4W

SCHEMATIC NO.	PART NO.	DESCRIPTION
METAL OXIDE RESISTOR		
R258	D04-D561C-F0	560 OHM +/-5% 1/2W
R301, 302	D04-D821C-F0	820 OHM +/-5% 1/2W
R292	D04-D222C-F0	2.2 kohm +/-5% 1/2W
R306	D04-D027C-G0	2.7 OHM +/-5% 1W
R311	D04-D100C-G0	10 OHM +/-5% 1W
R121	D04-D390C-G0	39 OHM +/-5% 1W
R626	D04-D221C-G0	220 OHM +/-5% 1W
R290	D04-D222C-G0	2.2 KOHM +/-5% 1W
R616	D04-D003C-H0	0.33 OHM +/-5% 2W
R614, 260	D04-D120C-H0	12 OHM +/-5% 2W
R256, 615	D04-D270C-H0	27 OHM +/-5% 2W
R257	D04-D822C-H0	8.2 KOHM +/-5% 2W
R413	D04-D153C-H0	15 KOHM +/-5% 2W
R308	D04-D222C-I0	2.2 KOHM +/-5% 3W
FUSIBLE RESISTOR		
R310	D03-E100C-F0	10 OHM +/-5% 1/2W
R312	D03-E043C-G0	4.3 OHM +/-5% 1W
NON-INFLAMMABLE RESISTOR		
R601	D03-G040D-J0	4 OHM +/-10% 5W KW-SQZ
R605	D03-G022D-H0	2.2 OHM +/-10% 2W KW-KNP
R313	D03-G039D-H0	3.9 OHM +/-10% 2W KW-KNP
R617	D03-G390D-K0	39 OHM +/-10% 6W KW-KNP
R602	D06-H300Z-00	P.T.C. THERMISTOR
CARBON COMPOSITION RESISTOR		
R618, 619	D05-B565D-F0	5.6 MOHM +/-10% 1/2W
R603, 604	D05-B184D-F0	180 KOHM +/-10% 1/2W
C242, 413	E04-B200A-00	TRIMMER CAPACITOR 20PF
CERAMIC CAPACITOR		
C124, 125	F01-C020F-A0	2PF 50V +/-0.25PF
C281	F01-C050F-C0	5PF 50V +/-5%
C241	F01-C100F-C0	10PF 50V +/-5%
C126, 224, 231	F01-C150F-C0	15PF 50V +/-5%
C243, 439	F01-C220F-C0	22PF 50V +/-5%
C137, 257	F01-C270F-C0	27PF 50V +/-5%
C401, 402	F01-C300F-C0	30PF 50V +/-5%
C202	F01-C330F-C0	33PF 50V +/-5%
C127, 128, 406	F01-C470F-C0	47PF 50V +/-5%
C212, 235, 407	F01-C560F-C0	56PF 50V +/-5%
C207, 245	F01-C680F-C0	68PF 50V +/-5%
C206, 211, 239	F01-C390F-C0	39PF 50V +/-5%
C429	F01-C820F-C0	82PF 50V +/-5%
C233, 414	F01-C101F-C0	100PF 50V +/-5%
C222, 437, 438	F01-C151F-C0	150PF 50V +/-5%
C282, 283, 284	F01-C201F-C0	200PF 50V +/-5%
C205, 210, 229, 230, 274, 435	F01-C221F-C0	220PF 50V +/-5%
C209, 214, 433, 434	F01-C331F-C0	330PF 50V +/-5%
C418	F01-C391F-C0	390PF 50V +/-5%
C258	F01-C561F-C0	560PF 50V +/-5%

ELECTRICAL PARTS LIST

SCHEMATIC NO.	PART NO.	DESCRIPTION	SCHEMATIC NO.	PART NO.	DESCRIPTION
C105, 107, 111, 112, 113, 116, 117, 118, 122, 129, 201, C204, 217, 218, 219, 221, 223, 237, 238, 240 251, 256 C268, 415, 416, 424, 425	F01-C103F-GO	0.01UF 50V +80-20%	C132, 253 C134, 279 C276 C120, 133 C607 C612 C314 C273 C106 C244, 265, 275, 428, 271	F01-E476C-E0 F01-E227C-E0 F01-E477C-E0 F01-E108C-E0 F01-E476D-E0 F01-E227D-E0 F01-E228D-E0 F01-E225F-D0 F01-E224F-E0 F01-E474F-E0	47UF 16V +/-20% 220UF 16V +/-20% 470UF 16V +/-20% 1000UF 16V +/-20% 47UF 25V +/-20% 220UF 25V +/-20% 1000UF 25V +/-20% 2.2UF 50V +/-10% 0.22UF 50V +/-20% 0.47UF 50V +/-20%
C136, 232, 278 C101, 103, 104, 119, 405, 410, 412 C108, 114, 208, 213, 269, 403, 436 C304, 313, 315, 318, 611, 131	F01-C104F-GO F01-C203F-GO F01-C102F-DO F05-C221N-DO	0.1UF 50V +80-20% 0.02UF 50V +80-20% 1000PF 50V +/-10% 220PF 500V +/-10%	C115, 307, 429 C280 C302, 423, 606, 617 C618 C301 C305 C316, 619 C303 C615 C616 C604 PCB001	F01-E105F-E0 **F01-N225F-E0 F01-E106F-E0 F01-E226F-E0 F01-E476F-E0 F01-E227F-E0 F01-E106H-F0 F01-E475I-F0 F01-E476I-F0 F01-E107I-F0 F01-E107M-F0 **G01-A819A-00	1UF 50V +/-20% 2.2UF 50V +/-20% 2.2UF 50V N.P. +/-20% 10UF 50V +/-20% 22UF 50V +/-20% 47UF 50V +/-20% 220UF 50V +/-20% 10UF 100V +/-20% 4.7UF 160V +50-10% 47UF 160V +50-10% 100UF 160V +50-10% 100UF 400V +50-10% MAIN P.C. BOARD 291MM X 219MM X 1.6MM
POLYESTER FILM CAPACITOR C248, 249, 250 C267, 605 C102, 220, 608 C272, 409 C270 C408 C121	F11-M223H-DO F11-M333H-DO F11-M104H-DO F11-M224H-DO F11-M153H-DO F11-M474H-DO F11-M332H-DO	0.022UF 100V +/-10% 0.033UF 100V +/-10% 0.1UF 100V +/-10% 0.22UF 100V +/-10% 0.015UF 100V +/-10% 0.47UF 100V +/-10% 0.0033UF 100V +/-10%	L102 L104 L201 L105, 106, 401 L202 L101 L302 L602 L601 T101 T102, 103 T104 T205 T206 T203 T204 T201, 202 DL202 T105, 106 T301 T302 T601	H05-0102A-00 H05-0103A-00 H05-0104A-00 H05-0105A-00 H05-0106A-00 H05-0111A-00 **H13-0203A-00 H02-0101A-00 H02-1031A-00 H01-1301A-00 H01-1302A-00 H01-1303A-00 H01-1401A-00 H01-1402A-00 H01-1403A-00 H01-1404A-00 H01-1405A-00 H01-0701A-00 H01-1801A-00 I01-0401A-00 I12-0501A-00 I07-0601A-00	PEAKING COIL 1UH PEAKING COIL 5.6UH PEAKING COIL 8.2UH PEAKING COIL 15UH PEAKING COIL 33UH PEAKING COIL 100UH CHOKE COIL 1UH CHOKE COIL 90UH CHOKE COIL 5UH PIF MATCHING COIL PIF DET COIL SIF DET COIL DELAY LINE MATCHING COIL BURST CLEANING COIL BELL FILTER COIL IDENT COIL DISCRI BURST Y-DELAY LINE 7MM TRAP COIL HORIZONTAL DRIVE TRANSFORMER FLYBACK TRANSFORMER CF65A SWITCHING TRANSFORMER
POLYPROPYLENE FILM CAPCITOR (B TYPE) C260 C261 C266 C264	F08-D152F-C0 F08-D562F-C0 F08-D302F-C0 F08-D103F-C0	0.0015UF 50V +/-5% 0.0056UF 50V +/-5% 0.003UF 50V +/-5% 0.01UF 50V +/-5%			
POLYPORPYLENE FILM CAPACITOR C310 C309 C311 C317 C308 C312 C610	F08-P222N-DO F08-P103K-DO F08-P473K-DO F08-P563K-DO F08-P524K-DO F08-P722P-C0 F08-P2220-DO	0.0022UF 630V +/-10% 0.01UF 200V +/-10% 0.047UF 200V +/-10% 0.056UF 200V +/-10% 0.52UF 200V +/-10% 0.0072UF 1.6KV +/-5% 0.0022UF 1200V +/-10%			
T-C CERAMIC CAPACITOR C123	F01-L680F-CO	68PF 50V +/-5%			
ELECTROLYTIC CAPACITOR (SINGLE ENDED TYPE) C404	F01-E337B-E0	330UF 10V +/-20%			
C110, 135, 215, 216, 228, 246, 247, 259, 277, 440	F01-E106C-E0	10UF 16V +/-20%			

ELECTRICAL PARTS LIST

SCHEMATIC NO.	PART NO.	DESCRIPTION
*** MAIN P. C. B. ASSEMBLY ***		
TRANSISTOR		
Q101	A01-C717A-00	2SC2717
Q103, 201, 401, 402, 404, 405, 406, 407, 409, 410, 413, 601, 603, 102	A01-C815E-00	2SC1815-Y
Q301	A01-C229D-00	2SC2229-0
Q202	A01-A562E-00	2SA562-TMY
Q302	A01-C073D-00	2SC2073
Q303	A01-A940D-00	2SA940
Q304	A01-C482D-00	2SC2482
Q305	A01-D426A-00	2SD1426
Q602	A01-B774D-00	2SB774-T
Q604	**A01-D431A-00	2SD1431
Q608	A01-C230E-00	2SC2230-AY
Q607	A03-D400F-00	2SD400F
Q605	A01-A013E-00	2SA1013Y
Q606	A02-C335C-00	2SC2335 ALTERNATE BUV46 (A01-V046C-00)
Q104	A01-C236D-00	2SC2236-0
Q105	A01-A966D-00	2SA966-0
Q412	A01-A015E-00	2SA1015Y
Q403	A06-S002D-00	BSX20
DIODE		
D101, 102, 211, 212, 220, 103, 409, 410, 411, 412, 413, 221, 414, 415, 416, 417, 419, 420, 421, 425, 423, 424, 104	B01-01148-00	1N4148
D201, 203, 204, 205, 206, 207, 209, 210, 213, 214, 215, D216, 218, 301, 304	B01-01555-00	1S1555
D307, 308, 603, 604, 605, 606, 608, 609, 610	B01-02529-00	S5295G
D306	B01-02529-01	S5295J
D607	B01-02835-00	1S1835
D302, 303	B01-02002-00	TVR-2D
BR601	B01-01010-00	DBA10G
D305	B01-01004-00	1N4004S
D202, 217, 219	B01-04120-00	12 V ZENER (GZA 12Y)
D601	B01-04082-00	8.2 V ZENER (GZA 8.2Y)
D602	B01-04090-00	9.1Y ZENER (GZA 9.1Y)
D401	**B01-04039-00	3.9V ZENER (UZ 3.9B)
D402	**B01-04051-00	5.1V ZENER (GAZ 5.1Y)
D418	**B01-04300-00	30V ZENER (GZA 30Y)

SCHEMATIC NO.	PART NO.	DESCRIPTION
SEMI-FIXED RESISTOR		
VR202, 405, 601	C01-B103B-C0	1KB MATRIX, B+, SUB-COLOR
VR101	C01-B503B-C0	5KB AGC
VR203, 205	C02-A104B-C0	10KB H-HOLD V-HEIGHT
VR204	C02-A205B-C0	200KB V-HOLD
VR201	**C07-C104B-80	10MM ROTARY VR10KB CONTRAST
VR404	**C01-B104B-C0	10KB SUB-BRIGHTNESS (HORI-TYPE)
CARBON FILM RESISTOR +/-5% 1/4W		
R295	D01-A056C-D0	5.6 OHM
R129, 130	D01-A010C-D0	1 OHM
R128	D01-A100C-D0	10 OHM
R108	D01-A270C-D0	27 OHM
R309	D01-A470C-D0	47 OHM
R288	D01-A680C-D0	68 OHM
R270, 294	D01-A820C-D0	82 OHM
R102,	D01-A101C-D0	100 OHM
R229, 230, 231	D01-A151C-D0	150 OHM
R433	D01-A181C-D0	180 OHM
R109, 206, 243	D01-A221C-D0	220 OHM
R242	D01-A241C-D0	240 OHM
R117, 214, 285, 611	D01-A331C-D0	330 OHM
R209	D01-A391C-D0	390 OHM
R223, 286, 287, 430	D01-A471C-D0	470 OHM
R125, 126, 236, 245, 259	D01-A561C-D0	560 OHM
R211, 216, 227, 228, 246, 247, 434, 625	D01-A681C-D0	680 OHM
R107, 233, 244, 266	D01-A821C-D0	820 OHM
R106, 110, 115, 118, 131, 240, 251, 252, 282, 420, 421, 120	D01-A102C-D0	1 KOHM
R426, 427, 462, 467, 468, 469, 470, 471, 472, 627, 235		
R205,	D01-A122C-D0	1.2 KOHM
R208, 213, 237, 241, 255, 424,	D01-D152C-D0	1.5 KOHM
R207, 212, 275, 608	D01-A182C-D0	1.8 KOHM
R111, 113, 119, 261, 291, 405	D01-A222C-D0	2.2 KOHM
R276, 458	D01-A242C-D0	2.4 KOHM
R127, 202, 284, 621	D01-A272C-D0	2.7 KOHM
R123, 210, 215, 224, 225, 226, 269, 416, 446, 607	D01-A332C-D0	3.3 KOHM
R267, 268	D01-A362C-D0	3.6 KOHM
R116, 232, 429, 474, 475	D01-A392C-D0	3.9 KOHM

**WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION",
SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.**

CAUTION: The areas marks $\triangle$ in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components read carefully the **PRODUCT SAFETY NOTICE** on page 2. Do not degrade the safety of the receiver through improper servicing.

ABBREVIATIONS

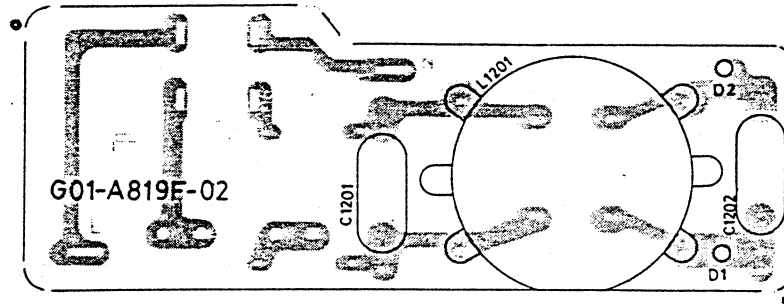
Resistors: CF — Carbon Film Resistor
CC — Carbon Composition Resistor
MF — Metal Film Resistor
MO — Metal Oxide Resistor
FU — Fusible Resistor
NI — Non-Inflammable Resistor
SF — Semi-fixed Resistor

Capacitors: CE — Ceramic Capacitor
PO — Polyester Film Capacitor
PP — Polypropylene Film Capacitor
EL — Electrolytic Capacitor
TC — Temperature Compensating Capacitor
MP — Metal Polyester Film Capacitor
AC — AC Capacitor

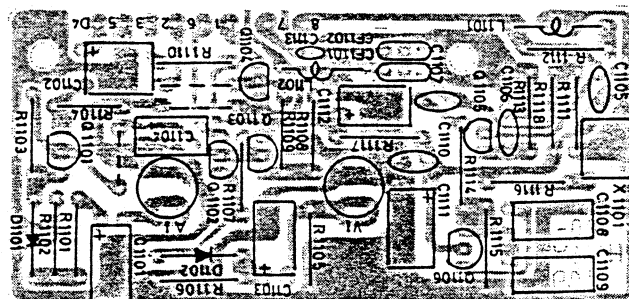
Wire: SJ — Single Jumper Wire AWG 22 (UL1007)
STJ — Strand Jumper Wire AWG 22 (UL1007)
ST — Strand Jumper Wire AWG 24 (UL1007)
STW — Strand Jumper Wire AWG 26 (UL1007)

Remark:
1) All resistors are $\frac{1}{4}W$, $\pm 5\%$ unless otherwise noted.
2) All capacitors are 50WV capacitor unless otherwise noted

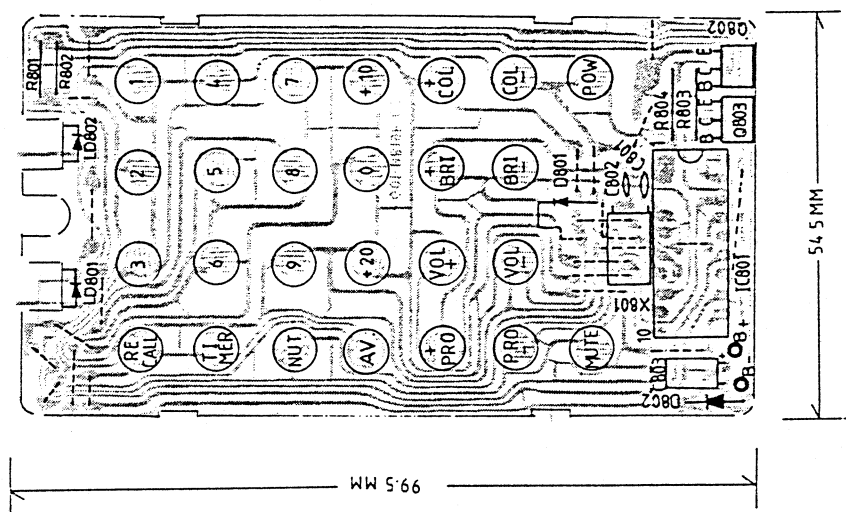
BOTTOM VIEW OF AC LINE FILTER BOARD



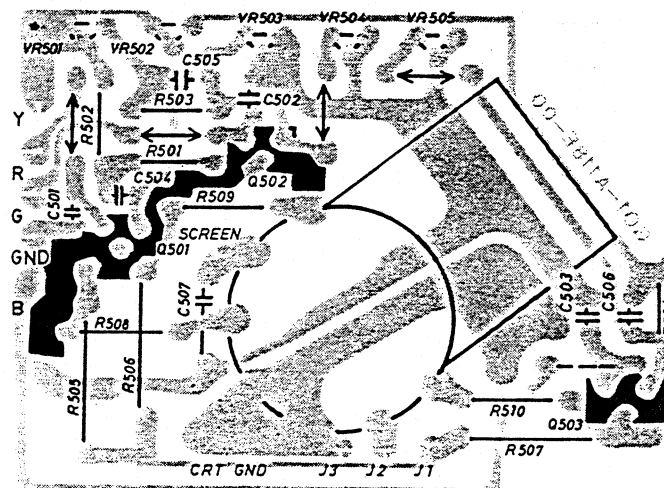
COMPONENT VIEW OF A.V. INPUT P.C. BOARD



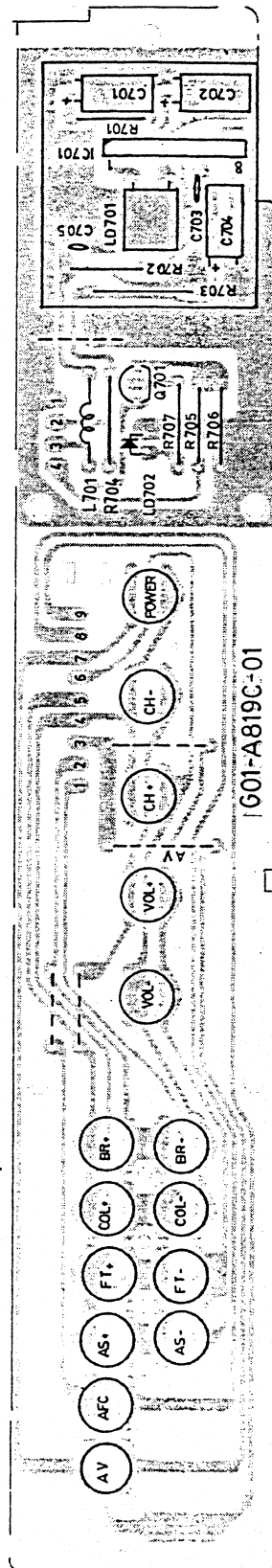
COMPONENT VIEW OF HANDSET P.C. BOARD



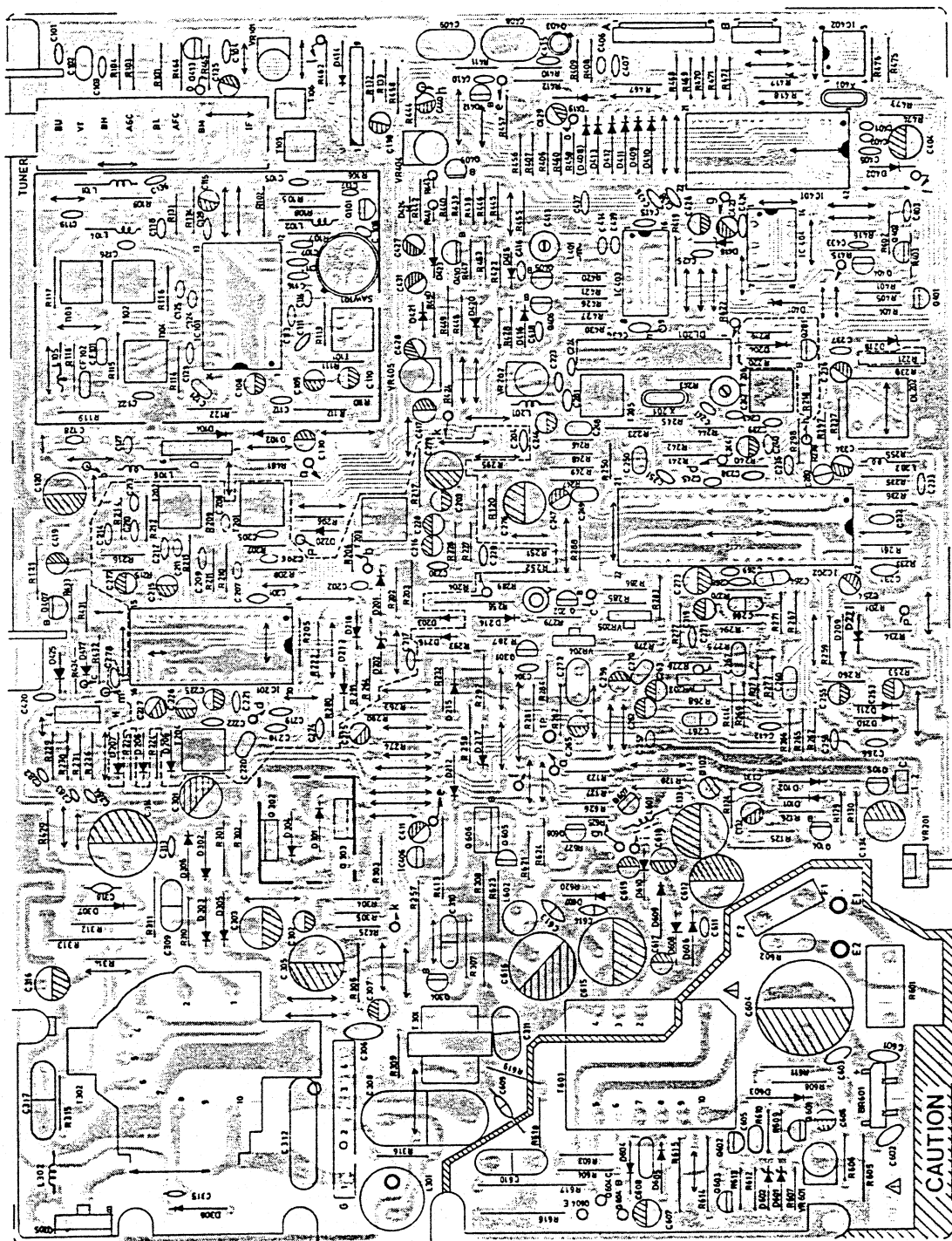
COPPER SIDE OF CRT P.C. BOARD



COMPONENT VIEW OF CONTROL P.C. BOARD

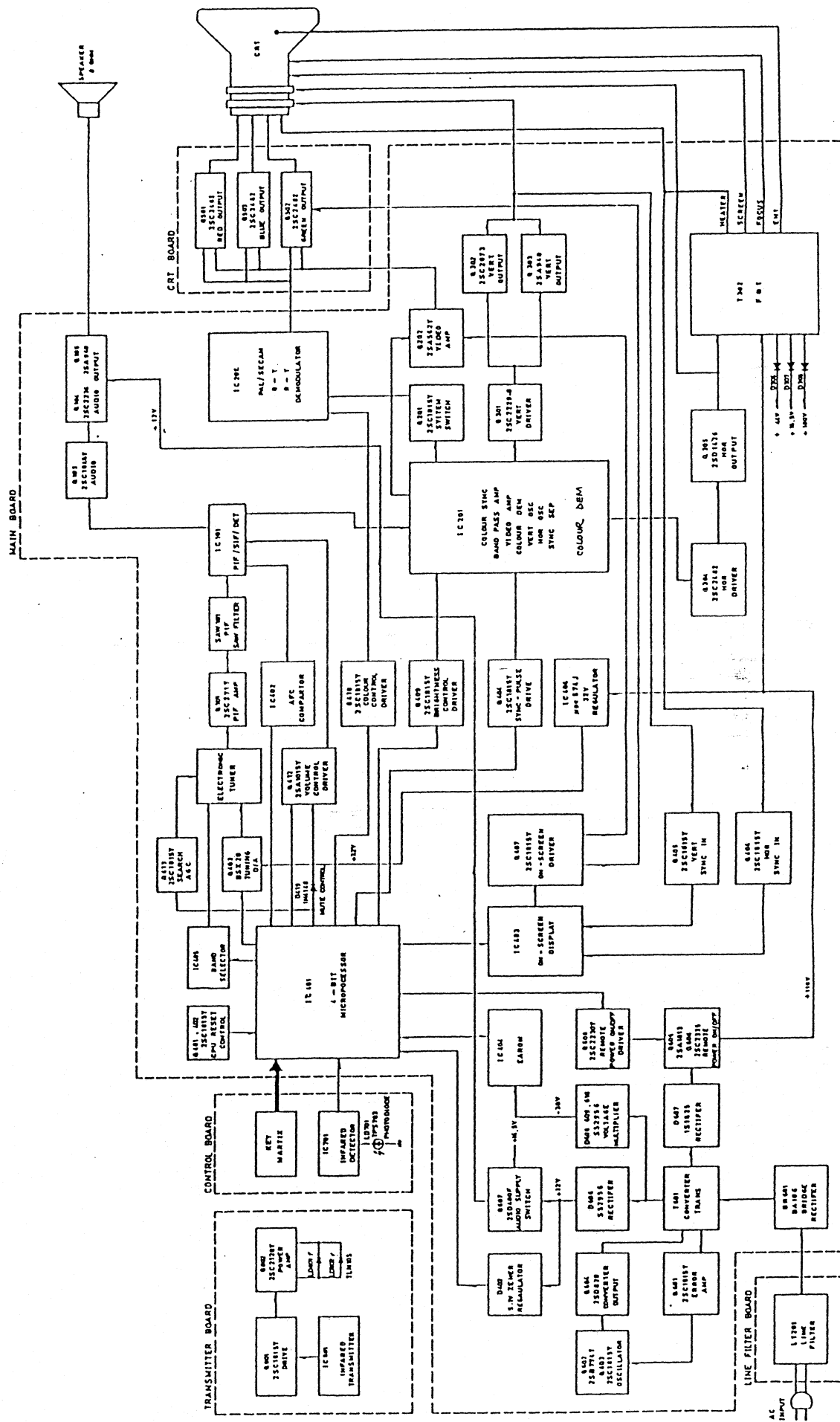


COMPONENT VIEW OF MAIN P.C. BOARD



291mm

BLOCK DIAGRAM



TUNER CIRCUIT

